

**CLAIM AMENDMENTS**

Please amend the claims (~~striketrough~~ indicating deletion and underline indicating insertion) as follows:

1 – 34 (cancelled)

35. (new) A process for recognizing an image, said process comprising:
- identifying a key image;
  - imposing an input vector based on the key image to a learning module of a computer-based neural network;
  - assigning connection values based on the input vector; and
  - classifying at least one target image based on a Markov chain distribution function.
36. (new) The process of Claim 35, wherein the step of classifying at least one target image comprises outputting a determination of a match between the key image and the target image.
37. (new) The process of Claim 35, wherein the step of classifying at least one target image comprises ranking a plurality of target images based on their likelihood of matching the key image.
38. (new) The process of Claim 35, wherein the step of classifying at least one target image comprises outputting at least one image/classification/weight triplet.
39. (new) The process of Claim 35, further comprising searching an image source for target images.
40. (new) The process of Claim 39, further comprising outputting a link to a target image within the image source.

41. (new) A process for determining whether a target image matches a known key image, said process comprising:

identifying a known key image;

imposing an input vector based on the known key image to a learning module of a computer-based neural network;

assigning connection values based on the input vector;

forming a Markov chain distribution function; and

outputting a determination based on the Markov chain distribution function of whether at least one target image matches the known key image.

42. (new) The process of Claim 41, wherein the step of outputting a determination based on the Markov chain distribution function of whether at least one target image matches the known key image comprises generating an image/classification/weight triplet for each target image.

43. (new) The process of Claim 41, further comprising ranking a plurality of target images based on their weighted similarity to the known key image.

44. (new) The process of Claim 41, further comprising searching an image source for the at least one target image.

45. (new) The process of Claim 44, further comprising outputting a link to a location of the at least one target image within the image source.

46. (new) A process for ranking the similarity of a plurality of target images to a known image, said process comprising:

identifying a known image;

imposing an input vector based on the known image to a learning module of a computer-based neural network;

assigning connection values based on the input vector; and

classifying a plurality of target images based on a Markov chain distribution function, and ranking the target images based on how closely they match the known image.

47. (new) The process of Claim 46, further comprising generating an image/classification/weight triplet for each target image.

48. (new) The process of Claim 46, further comprising searching an image source for the plurality of target images.

49. (new) The process of Claim 48, further comprising outputting a link to a location of each target image within the image source.